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EXAMINER	
AILES, BENJAMIN A	
ART UNIT	**PAPER NUMBER**
2142	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/848,713	GRUMANN ET AL.	
	Examiner	Art Unit	
	Benjamin A. Ailes	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-12,14-22 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-12,14-22 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to correspondence filed 06 December 2006.

2. Claims 1, 2, 4-12, 22 and 24 remain pending.

3. Applicants' amendment to claim 1 overcomes the previous 35 USC 112 second paragraph rejection and therefore the rejection has been withdrawn.

Response to Arguments

Applicants' arguments with respect to the rejection set forth under 35 USC 112, first paragraph, are deemed persuasive and therefore the rejection has been withdrawn.

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 2, 4-6, 8-12, 14, 15, 17-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helsper et al. (US 6,876,988 B2), hereinafter referred to as Helsper, in view of Scarpelli et al. (US 6,816,898 B1), hereinafter referred to as Scarpelli, and further in view of Goodman et al. (US 7,020,697 B1), hereinafter referred to as Goodman.

8. Regarding claim 1, Helsper teaches a method determining the health of a service resident on a host machine, comprising the method step of "collecting service performance information from the service" taught in column 10, lines 39-43 wherein the performance system receives measured input values representing the real-time performance of the components of the computer system. Helsper teaches the "translating the collected service performance information into a generic output relating to current operational performance of the service" in column 2, lines 42-60 wherein the performance system monitors and creates multiple output variables wherein each input variable is translated into an output variable and also the performance information gathered is translated from input data to variables representing component performance. Helsper does teach the use of performance monitoring tools (see figure 2, item 115; Fig 3B; Fig. 4A; Fig. 4B; Fig. 5; Fig. 6; Fig. 7; Fig. 8A; Fig, 8B; Fig. 9A; Fig. 9B; and Fig. 11) which teaches on the use of "different performance monitoring tools" and it is deemed an inherent characteristic that data must be read into these performance monitoring tools in order for data to be processed by the monitoring tools,

however, Helsper does not explicitly recite "wherein the generic output is one of a scriptable interface and an application programming interface" as claimed. However, in related art within the realm of computer network monitoring and the use of performance monitoring tools, Scarpelli teaches in column 4, lines 54-60 and Figure 3, items 110, 120 and 130, the extensive use of custom script programs and APIs for the processing of input data in regards to data being performance statistics gathered and then needing to be read into a performance monitoring tool. Scarpelli teaches the use of these custom script programs but does not explicitly recite wherein the generic output is actually one of a scriptable interface or an application programming interface. Taking its broadest reasonable interpretation in the art, the output data is interpreted when being translated as being any data type that can be processed by computer means. In view of Goodman, Goodman teaches wherein data can be translated from specific into a generic API and therefore readable by a plurality of different applications. Therefore, in view of Goodman, it would have been obvious to one of ordinary skill in the art at the time of the applicants' invention to utilize a script interface or an application programming interface when the reading in of performance information is necessitated. One of ordinary skill in the art would have been motivated to make the above combination due to the use of scripts or APIs enable easy integration when needing to gather specific information and useful performance metrics (see Scarpelli, column 4, lines 57-60).

9. Regarding claim 2, Helsper, Scarpelli and Goodman teach the method wherein the host machine comprises one or more components, further comprising:

collecting external performance information from one or more of the one or more components (Helsper, col. 3, lines 8-10);

translating the collected external performance information (Helsper, col. 2, ll. 55-60); and

combining the translated external performance information and the translated service performance information to provide the generic output (Helsper, col. 2, ll. 55-60).

10. Regarding claim 4, Helsper, Scarpelli and Goodman teach the method further comprising accessing the generic output to read the health of the service (Helsper, col. 3, ll. 53-58).

11. Regarding claim 5, Helsper, Scarpelli and Goodman teach the method wherein the collecting step comprises reading performance information provided by the service (Helsper, col. 3, ll. 53-58).

12. Regarding claim 6, Helsper, Scarpelli and Goodman teach the method wherein the collecting step comprises deriving performance information from the service (Helsper, col. 6, ll. 40-46).

13. Regarding claim 8, Helsper, Scarpelli and Goodman teach the method wherein the deriving step comprises using a probe program to read the performance information (Helsper, col. 10, ll. 40-45; Helsper teaches that "...system communicates with one or more of the monitoring system to...". Since Helsper's system is a computer system, then it is inherent that a program is used. Probe is defined as any device design to investigate and obtain information which is deemed the broadest reasonable interpretation.).

14. Regarding claim 9, Helsper, Scarpelli and Goodman teach the method wherein the collected service information relates to a plurality of performance metrics (col. 10, ll. 40-44), wherein the generic output comprises a plurality of service health metrics (Helsper, col. 12, ll. 2-8), and wherein the translating step comprises combining one or more of the plurality of performance metrics to provide one or more of the plurality of service health metrics (Helsper, col. 2, ll. 55-60 and col. 3, ll. 7-10).

15. Regarding claim 10, Helsper, Scarpelli and Goodman teach the method wherein the plurality of service health metrics comprises availability, capacity, throughput, service time, queue length, utilization, service level violations, and user satisfaction (Helsper, col. 10, ll. 49-51, 20-30, Fig. 3b-Fig. 9A).

16. Regarding claim 11, Helsper teaches an apparatus that determines a health of a service resident on a host machine, comprising "a data collection engine that collects service health information" taught in column 10, lines 39-43 wherein the performance system receives measured input values representing the real-time performance of the components of the computer system. Helsper teaches "a translation data analysis engine that translates the collected service health information using a health generation algorithm and provides one or more generic health metrics relating to current operational performance of the service" in column 2, lines 42-60 wherein the performance system monitors and creates multiple output variables wherein each input variable is translated into an output variable and also the performance information gathered is translated from input data to variables representing component performance. Helsper does teach the use of performance monitoring tools (see figure

2, item 115; Fig 3B; Fig. 4A; Fig. 4B; Fig. 5; Fig. 6; Fig. 7; Fig. 8A; Fig, 8B; Fig. 9A; Fig. 9B; and Fig. 11) which teaches on the use of "different performance monitoring tools" and it is deemed an inherent characteristic that data must be read into these performance monitoring tools in order for data to be processed by the monitoring tools, however, Helsper does not explicitly recite "wherein the generic output is one of a scriptable interface and an application programming interface" as claimed. However, in related art within the realm of computer network monitoring and the use of performance monitoring tools, Scarpelli teaches in column 4, lines 54-60 and Figure 3, items 110, 120 and 130, the extensive use of custom script programs and APIs for the processing of input data in regards to data being performance statistics gathered and then needing to be read into a performance monitoring tool. Scarpelli teaches the use of these custom script programs but does not explicitly recite wherein the generic output is actually one of a scriptable interface or an application programming interface. Taking its broadest reasonable interpretation in the art, the output data is interpreted when being translated as being any data type that can be processed by computer means. In view of Goodman, Goodman teaches wherein data can be translated from specific into a generic API and therefore readable by a plurality of different applications. Therefore, in view of Goodman, it would have been obvious to one of ordinary skill in the art at the time of the applicants' invention to utilize a script interface or an application programming interface when the reading in of performance information is necessitated. One of ordinary skill in the art would have been motivated to make the above combination due to the use of scripts or APIs enable easy integration when needing to

gather specific information and useful performance metrics (see Scarpelli, column 4, lines 57-60).

17. Regarding claim 12, Helsper, Scarpelli and Goodman teach the apparatus wherein the host machine comprises one or more external components, wherein the data collection engine collects external performance information from one or more external components (Helsper, col. 3, ll. 9-10) and wherein the data analysis engine translates the collected external information using the health generation algorithm to provide the one or more generic health metrics (Helsper, col. 3, ll. 55-60 and col. 6, ll. 45-57).

18. Regarding claim 14, Helsper, Scarpelli and Goodman teach the apparatus wherein the data collection engine, comprises:

a data query module that reas performance information from the service (Helsper, col. 10, ll. 40-45); and

a data derivation module that derives performance information from the service (Helsper, col. 6, ll. 40-46).

19. Regarding claim 15, Helsper, Scarpelli and Goodman teach the apparatus wherein the data derivation module derives the performance information from one or more of a wrapper program, a benchmark program, and a probe program (Helsper, col. 10, ll. 40-45; Helsper teaches that "...system communicates with one or more of the monitoring system to...". Since Helsper's system is a computer system, then it is inherent that a program is used. Probe is defined as any device design to investigate and obtain information which is deemed the broadest reasonable interpretation.).

20. Regarding claim 17, Helsper, Scarpelli and Goodman teach the apparatus further comprising an interval control engine that receives the service health information at a first time interval and provides an output having a second time interval different from the first time interval (Helsper, col. 6, ll. 30-32).

21. Regarding claim 18, Helsper teaches a method for monitoring health data of a service operating on a host machine, comprising "collecting service performance information from the service and collecting external performance information from components of the host machine" taught in column 10, lines 39-43 wherein the performance system receives measured input values representing the real-time performance of the components of the computer system. Helsper teaches "translating the collected service and external performance information according to a health generation algorithm to generate a generic service health output, providing the generic service health output relating to current operational performance of the service as an output file accessible by performance monitoring tools" in column 2, lines 42-60 wherein the performance system monitors and creates multiple output variables wherein each input variable is translated into an output variable and also the performance information gathered is translated from input data to variables representing component performance. Helsper does teach the use of performance monitoring tools (see figure 2, item 115; Fig 3B; Fig. 4A; Fig. 4B; Fig. 5; Fig. 6; Fig. 7; Fig. 8A; Fig, 8B; Fig. 9A; Fig. 9B; and Fig. 11) which teaches on the use of "different performance monitoring tools" and it is deemed an inherent characteristic that data must be read into these performance monitoring tools in order for data to be processed by the monitoring tools,

however, Helsper does not explicitly recite "wherein the generic output is one of a scriptable interface and an application programming interface" as claimed. However, in related art within the realm of computer network monitoring and the use of performance monitoring tools, Scarpelli teaches in column 4, lines 54-60 and Figure 3, items 110, 120 and 130, the extensive use of custom script programs and APIs for the processing of input data in regards to data being performance statistics gathered and then needing to be read into a performance monitoring tool. Scarpelli teaches the use of these custom script programs but does not explicitly recite wherein the generic output is actually one of a scriptable interface or an application programming interface. Taking its broadest reasonable interpretation in the art, the output data is interpreted when being translated as being any data type that can be processed by computer means. In view of Goodman, Goodman teaches wherein data can be translated from specific into a generic API and therefore readable by a plurality of different applications. Therefore, in view of Goodman, it would have been obvious to one of ordinary skill in the art at the time of the applicants' invention to utilize a script interface or an application programming interface when the reading in of performance information is necessitated. One of ordinary skill in the art would have been motivated to make the above combination due to the use of scripts or APIs enable easy integration when needing to gather specific information and useful performance metrics (see Scarpelli, column 4, lines 57-60).

22. Regarding claim 19, Helsper, Scarpelli and Goodman teach the method wherein the step of collecting the service performance information comprises reading first

service performance parameters, and wherein the step of collecting the external performance information comprises reading first external performance parameters and deriving second external performance parameters (Helsper, col. 10, ll. 40-45, col. 3, ll. 8-15, col. 6, ll. 40-45; wherein the inputted values are the second service performance and second external performance parameters.).

23. Regarding claim 20, Helsper, Scarpelli and Goodman teach the method further comprising collecting the service performance information on a first time interval and adjusting the first time interval to provide the generic service health output at a second time interval (Helsper, col. 6, ll. 30-35). Examiner is interpreting "adjusting the first time interval" to mean changing the "first time interval" which can be accomplished by adding more time to the "first time interval" to obtain the "second time interval" which Helsper does by using measured input data (data that relates to a first time interval) to predict near-term performance (second time interval) (col. 2, ll. 55-60, col. 12, ll. 10-15 and lines 64-65).

24. Regarding claims 21 and 24, Helsper teaches an apparatus that determines a health of a service, wherein the service operates on a host computer, comprising "a collection module that receives performance information related to the service" taught in column 10, lines 39-43 wherein the performance system receives measured input values representing the real-time performance of the components of the computer system. Helsper teaches "a translation health generator module that applies a rule set to the received performance information and derives generic health metrics therefrom and an output module that outputs the generic health metrics relating to current

operational performance of the service" in column 2, lines 42-60 wherein the performance system monitors and creates multiple output variables wherein each input variable is translated into an output variable and also the performance information gathered is translated from input data to variables representing component performance. Helsper does teach the use of performance monitoring tools (see figure 2, item 115; Fig 3B; Fig. 4A; Fig. 4B; Fig. 5; Fig. 6; Fig. 7; Fig. 8A; Fig, 8B; Fig. 9A; Fig. 9B; and Fig. 11) which teaches on the use of "different performance monitoring tools" and it is deemed an inherent characteristic that data must be read into these performance monitoring tools in order for data to be processed by the monitoring tools, however, Helsper does not explicitly recite "wherein the generic output is one of a scriptable interface and an application programming interface" as claimed. However, in related art within the realm of computer network monitoring and the use of performance monitoring tools, Scarpelli teaches in column 4, lines 54-60 and Figure 3, items 110, 120 and 130, the extensive use of custom script programs and APIs for the processing of input data in regards to data being performance statistics gathered and then needing to be read into a performance monitoring tool. Scarpelli teaches the use of these custom script programs but does not explicitly recite wherein the generic output is actually one of a scriptable interface or an application programming interface. Taking its broadest reasonable interpretation in the art, the output data is interpreted when being translated as being any data type that can be processed by computer means. In view of Goodman, Goodman teaches wherein data can be translated from specific into a generic API and therefore readable by a plurality of different applications. Therefore, in

view of Goodman, it would have been obvious to one of ordinary skill in the art at the time of the applicants' invention to utilize a script interface or an application programming interface when the reading in of performance information is necessitated. One of ordinary skill in the art would have been motivated to make the above combination due to the use of scripts or APIs enable easy integration when needing to gather specific information and useful performance metrics (see Scarpelli, column 4, lines 57-60).

25. Regarding claim 22, Helsper, Scarpelli and Goodman teach the apparatus wherein the collection module receives external performance information from one or more external services coupled to the host computer and receives internal performance information related to operation of the service on the host computer (Helsper, col. 3, ll. 9-15).

26. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helsper, Scarpelli and Goodman in view of Chappelle (US 5,949,976).

27. Regarding claim 7, Helsper, Scarpelli and Goodman do not explicitly teach of using a wrapper program. Chappelle teaches about using a wrapper program (performance monitoring and graphing tool) to read the performance information (col. 3, ll. 29-32). The examiner is interpreting wrapper program as any program that is used as an interface program because this gives the broadest reasonable interpretation. In Helsper's invention, the performance forecasting system communicates with one or more monitoring system (col. 10; ll. 40-41). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utlize the teaching of

Chappelle in regards to using a wrapper program because it would have allowed the performance forecasting system to read the information supplied by various monitoring systems regardless of the components particular infrastructure. One of ordinary skill in the art would have been motivated because this modification would result in a more versatile system as outlined above.

28. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helsper, Scarpelli and Goodman in view of Walrand et al. (US 6,647,413), hereinafter referred to as Warland.

29. .Regarding claim 16, Helsper, Scarpelli and Goodman do not explicitly teach of a weighting scheme that weights one or more performance information parameters; a summation scheme that combines one or more performance information parameters; and a averaging scheme that averages collected service health information for a service health metric. However, Walrand teaches on these aspects. Walrand teaches about a summation scheme that combines one or more performance information parameters (col. 7, ll. 32-33) and an averaging scheme that averages collected service health information for a service health metric (col. 7, ll. 55-57). In HPCN Walrand teaches of a weighting scheme that allocates different level of importance to different parameters (p. 2). One objective of Walrand invention is to optimize the network performance (col. 2, ll. 53-54). It is an objective of Helsper invention to allow e-business to optimize the performance of their systems (col. 1, ll. 25-60). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utilize the above mentioned features of Walrand's into Helsper's invention because adding these features

to Helsper's system would allow him to focus on specific parameters (using the weighting scheme) and give him information regarding the overall performance of the network system (using the summation and averaging schemes). These added features would allow Helsper to provide a healthy network and more effectively predict failure of registered computing devices (col. 2, ll. 25-34) resulting in a more efficient performance forecasting system. It is for this reason that one of ordinary skill in the art at the time of invention would have been motivated to make the above-mentioned modifications.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

baa

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PRIMARY EXAMINER